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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,581	08/19/2003	Fang-Chen Cheng	29250-001063/US	2943
<div>7590 04/23/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. Box 8910 Reston, VA 20195</div>			<div>EXAMINER TSEGAYE, SABA</div>	
			<div>ART UNIT 2616</div>	<div>PAPER NUMBER</div>
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/642,581

Applicant(s)

CHENG ET AL.

Examiner

Saba Tsegaye

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Vayanos et al. (US 2002/0122400 A1).

Regarding claims 1 and 11, Vayanos discloses a method for enhanced uplink data transmission, comprising:

independently generating a transport channel for each transmission mode, each transport channel having an associated transmission time interval (TTI) (0002; 0009; 0027);

multiplexing the generated transport channels on a selected TTI basis to form a composite transport channel, the selected TTI being selected from one of the TTIs associated with the independently generated transport channels (0029-0031); and

mapping the composite transport channel onto a physical channel (0033-0034).

Regarding claim 2, Vayanos disclose the method wherein the selected TTI is a minimum of the TTI associated with the independently generated transport channels (0037).

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Regarding claim 3, Vayanos discloses the method wherein the independently generating step generates first and second transport channels having first and second TTIs, and the second TTI is a multiple of the First TTI (0033; 0037).

Regarding claim 4, Vayanos discloses the method wherein the transmission mode associated with the first transport channel is a scheduled transmission mode and the transmission mode associated with the second transport channel is an autonomous transmission mode (0030-0031).

Regarding claim 5, Vayanos discloses the method wherein the first TTI is 2ms and the second TTI is 10ms (0040).

Regarding claim 6, Vayanos discloses the method wherein the generating step independently generates transport channels for more than one transmission mode (see fig. 2).

Regarding claim 7, Vayanos discloses the method wherein the TTI of each transmission mode is one of a sub-multiple and multiple of 10 ms (0040).

Regarding claim 8, Vayanos discloses the method wherein the independently generating step generates first and second transport channels having first and second TTIs, the transmission mode associated with the first transport channel is a scheduled transmission mode and the

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transmission mode associated with the second transport channel is a autonomous transmission mode (0030-0031).

Regarding claim 9, Vayanos discloses the method wherein the first TYI is 2ms and the second TTI is 10ms (0040).

Regarding claim 10, Vayanos discloses the method wherein the mapping step maps the composite transport channel onto the physical channel on the selected TTI basis (0034).

Regarding claim 12, Vayanos discloses the method of wireless uplink communication comprising: mapping at least two transport channels within a physical channel (0034).

Regarding claim 13, Vayanos discloses the method wherein each of the transport channels has a distinct transmission time interval ("TTI") associated thereto (0002, 0037).

Regarding claim 14, Vayanos discloses the method wherein the two transport channels are generated for each transmission mode (see fig. 2).

Regarding claim 15, Vayanos discloses the method comprising: multiplexing the two transport channels to form a composite transport channel (0033-0034).

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Regarding claim 16, Vayanos discloses the method wherein the two transport channels are multiplexed in response to a selected transmission time interval (TTI) basis (0032-0033).

Regarding claim 17, Vayanos discloses the method wherein the selected TTI is a minimum of the TTIs associated with the independently generated transport channels (0037).

Regarding claim 18, Vayanos discloses the method wherein the transport channels are generated by generating at least a first and a second transport channel having first and second TTIs, and the second TTI is a multiple of the first TTI (0033).

Regarding claim 19, Vayanos discloses the method wherein the transmission mode associated with the first transport channel is a scheduled transmission mode and the transmission mode associated with the second transport channel is an autonomous transmission mode (0031).

Regarding claim 20, Vayanos discloses the method wherein the step of mapping maps the composite transport channel onto the physical channel on the selected TTI basis (0034).

3. Claims 1 and 11 rejected under 35 U.S.C. 102(e) as being anticipated by Kwak et al. (US 2003/0076799 A1).

Regarding claims 1 and 11, Kwak discloses a method for enhanced uplink data transmission, comprising:

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independently generating a transport channel for each transmission mode, each transport channel having an associated transmission time interval (TTI) (fig. 3; 301, 302);

multiplexing the generated transport channels on a selected TTI basis to form a composite transport channel, the selected TTI being selected from one of the TTIs associated with the independently generated transport channels (fig. 3; 311); and

mapping the composite transport channel onto a physical channel (fig.3; 312).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cai et al. (US 2004/0229624 A1) discloses adapting a diversity transmission mode in a wireless communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ST

April 13, 2007



CHI PHAM
SUPERVISORY PATENT EXAMINER

4/16/07